

Amphibia, Anura, Centrolenidae, *Vitreorana uranoscopa* (Müller, 1924): New record for the northeastern region of the state of Rio Grande do Sul, Brazil

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ABSTRACT: The Atlantic Forest Biome is among the world's hotspots for biodiversity conservation and concentrates the greatest diversity of amphibians in the world. However, information on the distribution pattern of species is largely unknown in this biome. This study report new records of *Vitreorana uranoscopa* for northeast region of Rio Grande do Sul.

The genus *Vitreorana* currently contains eight species, with distribution in Argentina, Brazil, Colombia, Guyana, Ecuador, Paraguay and Venezuela (Guayasamin *et al.* 2009; Frost 2011). In Brazil, the genus is represented by *Vitreorana eurygnatha* (Lutz, 1925), *Vitreorana oyampiensis* (Lescure, 1975), *Vitreorana parvula* (Boulenger, 1895) and *Vitreorana uranoscopa* (Müller, 1924) (Lima *et al.* 2005; Guayasamin *et al.* 2009).

Vitreorana uranoscopa has geographical distribution in Brazil, Argentina and Paraguay (Heyer 1985; Stetson 2001; Frost 2011; IUCN 2010). The species is endemic to the Brazilian Atlantic Forest, occurring from the states of Espírito Santo to Rio Grande do Sul (Heyer 1985; Garcia and Vinciprova 1998; IUCN 2010). It is usually found in environments close to streams of clear water within forested areas (Eterovick *et al.* 2005; Lucas and Fortes 2008; Machado *et al.* 2010). The populations of *V. uranoscopa* are in decline (Eterovick *et al.* 2005; IUCN 2010), and the species is endangered in the states of Rio Grande do Sul (Fontana *et al.* 2003), Paraná (Segalla and Langone 2004) and Espírito Santo (SEAMA 2005).

In Rio Grande do Sul, this species is poorly studied, being recorded to the north region in the municipalities of Planalto, Rodeio Bonito and Barracão (Garcia and Vinciprova 2003). Recently, Machado *et al.* (2010) expanded the distribution of the species for the eastern region, in the municipality of São Marcos. There is a paucity of data on its occurrence and on population censuses in Rio Grande do Sul, so that further studies on its distribution are needed for an accurate assessment of its conservation status. Therefore, this study represents a new record of *V. uranoscopa* in the state of Rio Grande do Sul (Figure 1).

The study was carried out at the cascade of Maringá (28°30'S, 52°05'W), municipality of Vila Maria, northeastern state of Rio Grande do Sul. The area has approximately 3,5 ha and has an interesting phytophysionomic diversity

of environments, housing small ecosystems, which are formed by varying topography and a gradient of ecological factors such as humidity, temperature and luminosity. The altitude varies between 528 and 605 m above sea level. The region has a humid temperate climate with hot summers (Koppen 1931), average temperature of 16 to 18°C and average annual rainfall between 1600 and 2000 mm, regularly distributed (Rio Grande do Sul 1994). The local vegetation is the domain of the Atlantic Forest Biome (IBGE 2010), featuring an enclave of two phytophysionomic types, the mixed montana forest in the highest parts and semi-deciduous seasonal forest occupying the slopes and the valley drained by the Jordão creek, the latter being the dominant phytophysionomic type.

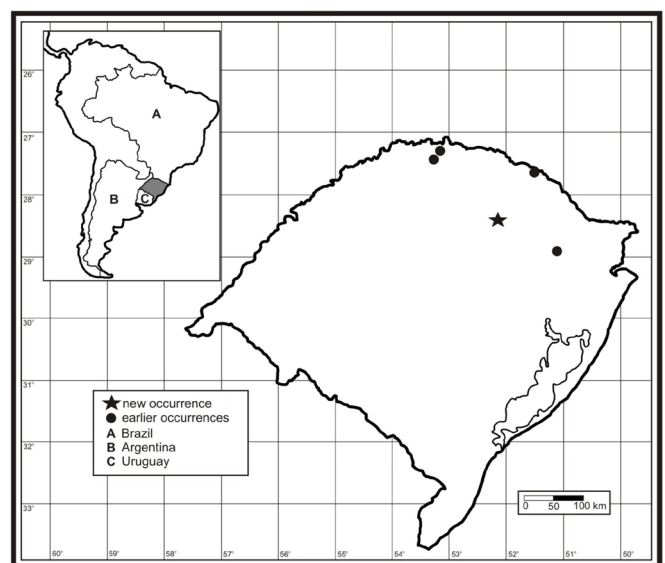


FIGURE 1. Map showing the distribution of *Vitreorana uranoscopa* in the state of Rio Grande do Sul and the new area of occurrence (star) in the northeast of the state.

The record of *V. uranoscopa* was held in October 2010, in the banks of the Jordão creek, a tributary of the Guaporé River, part of the Jacuí River basin, one of the most important of the state. On the marginal vegetation we observed five males in calling activity, two couples in amplexus and one spawning with 30 eggs (Figure 2). Despite the small size, the occurrence of *V. uranoscopa* in the cascade of Maringá shows the good conservation conditions of the area, since the requirement of the species to specific habitat characteristics is well known (Garcia and Vinciprova 2003; Cisneros-Heredia and McDiarmid 2007). The new record of *V. uranoscopa* in the northeast of Rio Grande do Sul, contributes to the knowledge of its distribution in the state and also to create strategies to protect this species considered threatened by extinction in the state (Fontana et al. 2003). Voucher specimens are housed at Coleção de Anfíbios da Universidade Comunitária da Região de Chapecó (CAUC 0988-0989).

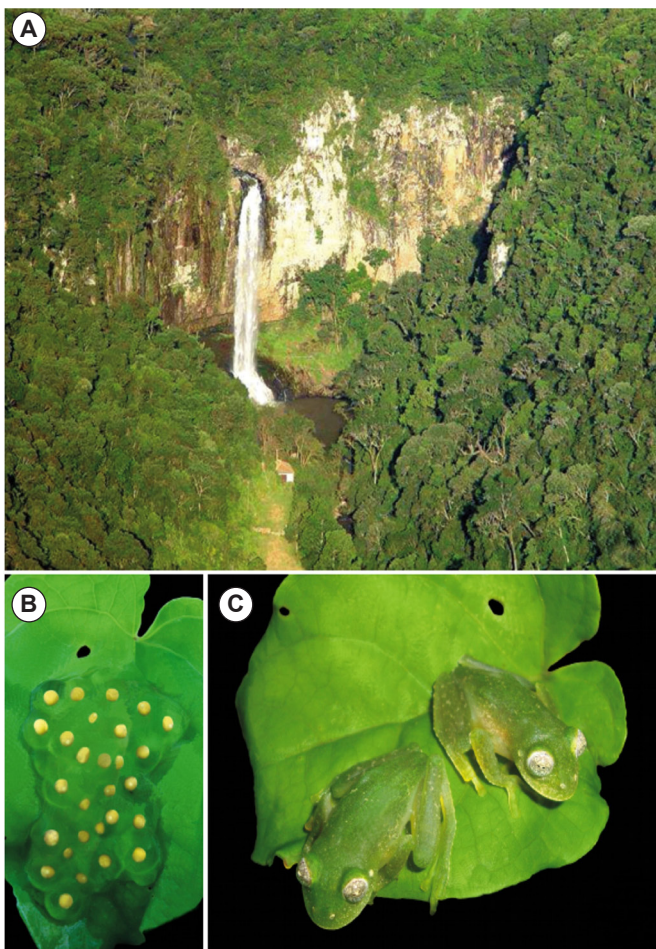


FIGURE 2. (A) Cascade of Maringá, (B) oviposition on leaves and (C) adults of *Vitreorana uranoscopa*. Photos by Marcoandre Savaris (B and C) and public domain (A).

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